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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,768	01/31/2001	Dror Segal	32941 070591.0135	5534

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NEW YORK, NY 10112

EXAMINER

HARBECK, TIMOTHY M

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/774,768

Applicant(s)

SEGAL ET AL.

Examiner

Timothy M. Harbeck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 31 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, are rejected under 35 U.S.C. 102(e) as being anticipated by Hauk et al (hereinafter Hauk US 2003/0126068 A1).

**Re Claim 1:** Hauk discloses a virtual trading floor system comprising

- Maintaining data representing a three dimensional model of said exchange trading area, said model including surfaces (paragraph 0012)
- Receiving and maintaining in a computer memory data representing exchange operations (paragraph 0016-0018)
- Generating a two dimensional representing a selected aspect view of said three dimensional model, said two dimensional display including perspective views of at least some surfaces of the model (paragraph 0012)

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- Generating alphanumeric images of selected data representing exchange operations (See Figure 4 and paragraph 0052; “quote board” and paragraph 0049)
- Mapping alphanumeric images onto selected ones of said perspective views (See Figure 4 and paragraph 0052; “quote board” and paragraph 0049))

**Re Claim 2:** Hauk discloses the claimed method supra and further discloses the steps of:

- Changing said selected aspect view of said three dimensional model (See paragraph 0051-0052; green and red jackets and changing of the quote board)
- Generating a further two dimensional display representing said changed aspect view, said further two dimensional display including further perspective views of at least some of said surfaces of said model (See paragraph 0051-0052; green and red jackets and changing of the quote board)
- Mapping said alphanumeric images onto selected ones of said further perspective views in said further two dimensional display (paragraph 0049)

**Re Claim 3:** Hauk discloses the claimed method supra and further discloses the steps wherein portions of said two dimensional display are selectable, said selectable display portions being operable when selected for displaying further data correlated to

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said selectable display portions (paragraph 0052-0054; specifically the "optionally viewed graphs").

**Re Claim 4:** Hauk discloses the claimed method supra and further discloses the steps wherein at least some of said selectable display portions comprise said perspective aspect views, and wherein said further data is correlated to data represented by said alphanumeric images mapped onto said perspective aspect view (paragraphs 0052-0054 and; paragraph 0066 graphs may comprise part of virtual reality trading floor)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-10 and 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauk in view of Ashbrook (Tom Ashbrook; "You Are About to Travel into Another Reality" Boston Globe (pre 1997 FullText). Boston Mass.: Jul 28, 1988. pg 65.)

**Re Claim 5:** Hauk has previously shown in the rejections of claims 1-4 a virtual trading floor system comprising:

- Maintaining data representing a three dimensional model of an exchange trading area

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- Receiving and maintaining in a computer memory data representing exchange operations
- Generating a two dimensional display representing a selected view of said three dimensional model, said selected aspect view including one or more model portions said model portions having selectable parts being selectable and operative when selected to display further data from said computer memory correlated to said selected parts.

Hauk does not explicitly disclose wherein the virtual trading floor is specifically for trading securities at a plurality of trading posts. Hauk shows a virtual reality of a typical pit associated with the open outcry system of trading futures and option contracts.

Anyone skilled in the ordinary art at the time of invention would realize the close parallels between the trading floors of a futures market when compared to a typical securities market. Both trading floors include buyers and sellers whom communicate through various gestures as well as specific language related to a particular trade.

Hence, if a virtual reality trading floor existed for the open outcry system it would have been obvious to someone skilled in the ordinary art to adapt this teaching to create a virtual trading floor for a securities market, albeit with different model portions (trading posts) that are unique to that market. The system and method remains the same though.

Furthermore, Ashbrook discloses that as far back as the late 1980's that "exasperated brokers on Wall Street's trading floors have inquired about 'virtual reality' stock trading centers that brokers could electronically inhabit from dispersed locations

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(SEE third paragraph of Abstract).” This is direct motivation for adapting the trading floor system of Hauk, concerning futures markets, to a securities markets so that these ‘exasperated brokers’ could work from remote locations and not have to be at the site of the trading floor to complete transactions.

**Re Claims 6-10:** These claims contain essentially the same limitations claimed within previously rejected claims 1-4. The only difference is that they specifically refer to the securities market and the model portions thereof. It has been shown in the rejections of claim 5 that it would have been obvious to include the teachings of Ashbrook to the disclosure of Hauk to provide a virtual reality-trading floor unique to the securities market, including modeling portions of the floor unique to the securities market. Other limitations including the mapping of alphanumeric images and generating and mapping images with additional relevant information have been previously rejected at various points in claims 1-4 and are therefore claims 6-10 are rejected using the same art and rationale.

**Re Claims 15-20:** Further system claims would have been obvious from previously rejected method claims 5-10 and are therefore rejected using the same art and rationale.

**Re Claim 21:** Hauk in view of Ashbrook discloses the claimed system supra and Hauk further discloses displaying data representing the operation of an exchange wherein the computer system is further configured and programmed to receive and maintain in a computer memory real time and historical data integrated from several sources representing trading of said securities (paragraph 0052; “view current and past

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price information on both the active market simulated on the virtual trading floor and other markets.”)

**Re Claim 22:** Hauk in view of Ashbrook discloses the claimed system supra and Hauk further discloses displaying data representing the operation of an exchange wherein the computer system is further configured and programmed to receive and maintain in a computer memory real time and historical data integrated from several sources representing trading of said securities and normalized market data (paragraph 0054; the graphs may present market information in any form useful to a trader.)

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauk et al (hereinafter Hauk US 2003/0126068 A1).

**Re Claims 11-14:** Further system claims would have been obvious to perform previously rejected method claims 1-4 and are therefore rejected using the same art and rationale.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

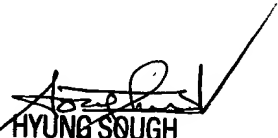


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HYUNG SOUGH  
SUPERVISORY PATENT EXAMINER  
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